



August 31, 2004
AB,IF,GG,WM,DP,RS

Meeting 1: topics explored

- Explored:
 - Stakeholder Goals
 - Technical Program
 - Compute Elements
 - Storage Elements
 - Monitoring
- Not explored
 - Unified Job Submission
 - VO details.

Stakeholder Goals

- Be consistent with maintain acceptable production levels for experiments in production.
- Be consistent with FNAL having a unified grid of > 1000 CPUs for the OSG.
- Provide a technical framework that provides a basis for R2 + CMST1 sharing resources at FNAL.
- Provide incentive for experiments to converge on interoperating, grid based technical solutions.

Some characteristics of Compute Frameworks

- SAM
 - Access via JIM
 - Realized via plug-in to GRAM
 - SamGrid authorization
- CAF
 - TBD
 - KRB5
- OSG
 - Globus Job Manager
 - Realized by plug-in to GRAM
 - VOMS

Fermigrid Work

- X – native access
 - Existing
 - Or in Expt's pre-FermiGrid work plan
- *En* – Work to do for FermiGrid
 - E0: Installation, have done this before
 - E1: Installation by experienced person, some technical risk
 - E2: No operational experience at FNAL, though some evidence of success elsewhere. May require some development
 - E5: Substantial Development

Current work

Facility	Support for SAM access	Support for OSG/CMS access	Support for CAF access
D0 Farm	X (in progress)		
D0 CAB	X (planned)		
D0 CABSrv1	X (planned)		
CMS Grid 3 cluster		X	
CMS Condor Cluster		X	
CMS Icl Cluster		X(planned)	
CDF CAF			X(planned)
CDF Condor CaF			X(planned)
CDF Farm			X(planned)
FNAL GPF	X		

E0 – Installation

Facility	Support for SAM access	Support for OSG/CMS access	Support for CAF access
D0 Farm	X (in progress)		
D0 CAB	X (planned)		
D0 CABSrv1	X (planned)		
CMS Grid 3 cluster		X	
CMS Condor Cluster		X	
CMS Icl Cluster		X(planned)	
CDF CAF	E0	E0	X(planned)
CDF Condor CaF	E0	E0	X(planned)
CDF Farm	E0	E0	X(planned)
FNAL GPF	X		

E1 – Notion, No experience

Facility	Support for SAM access	Support for OSG/CMS access	Support for CAF access
D0 Farm	X (in progress)	E1	
D0 CAB	X (planned)	E1	
D0 CABSrv1	X (planned)	E1	
CMS Grid 3 cluster	E1	X	
CMS Condor Cluster	E1	X	
CMS Icl Cluster	E1	X(planned)	
CDF CAF	E0	E0	X(planned)
CDF Condor CaF	E0	E0	X(planned)
CDF Farm	E0	E0	X(planned)
FNAL GPF	X	E1	

E2 – Similar to Joint Center at UCSD

Facility	Support for SAM access	Support for OSG/CMS access	Support for CAF access
D0 Farm	X (in progress)	E1	
D0 CAB	X (planned)	E1	
D0 CABSrv1	X (planned)	E1	
CMS Grid 3 cluster	E1	X	E2
CMS Condor Cluster	E1	X	E2
CMS Icl Cluster	E1	X(planned)	E2
CDF CAF	E0	E0	X(planned)
CDF Condor CaF	E0	E0	X(planned)
CDF Farm	E0	E0	X(planned)
FNAL GPF	X	E1	

E5 – Condor Glide in at D0

Facility	Support for SAM access	Support for OSG/CMS access	Support for CAF access
D0 Farm	X (in progress)	E1	E5
D0 CAB	X (planned)	E1	E5
D0 CABSrv1	X (planned)	E1	E5
CMS Grid 3 cluster	E1	X	E2
CMS Condor Cluster	E1	X	E2
CMS Icl Cluster	E1	X(planned)	E2
CDF CAF	E0	E0	X(planned)
CDF Condor CaF	E0	E0	X(planned)
CDF Farm	E0	E0	X(planned)
FNAL GPF	X	E1	

Storage systems

- Both SAM and Dcache have grid interfaces.
- Work: Make sure the interfaces are equivalent.
- We can imagine STKEN might be on the OSG in a stand alone way as a strategic store.

	Dcache	SAM
CMS	X	
DO		X
CDF	X	X
STK EN	X	

Monitoring

- Stakeholder level:
 - Amount of utility delivered
 - through the FermiGRid door
 - By the resources themselves.
- Technical level
 - May depend on the how jobs are submitted.
 - Seems there is a software or integration task to build a unified view.

ToDo

- Unified Job Submission
- Details of VO.
- Propose meeting 2 Next Tuesday AM.
 - Focus on Unified Job submission.
 - Requires JIM and Condor brokering expertise.